



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-0024; Project Identifier AD-2022-01492-A; Amendment 39-22311; AD 2023-02-04]

RIN 2120-AA64

Airworthiness Directives; Mooney International Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Mooney International Corporation Model M20C, M20D, M20E, M20F, and M20G airplanes. This AD was prompted by reports of the hybrid material elevator balance weight cracking. This AD requires inspecting to determine whether a certain elevator balance weight is installed. If installed, this AD requires inspecting each affected elevator balance weight for corrosion and cracking, and depending on the findings, either replacing each affected elevator balance weight with a non-hybrid (lead) elevator balance weight or repetitively inspecting each affected elevator balance weight. This AD also prohibits the installation of an affected elevator balance weight on any airplane. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2023-0024; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The street address for Docket Operations is listed above.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Mooney International Corporation, 165 Al Mooney Road North, Kerrville, TX 78028; phone: (800) 456-3033; email: support@mooney.com; website: [mooney.com](https://www.mooney.com).

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2023-0024.

FOR FURTHER INFORMATION CONTACT: Bang Nguyen, Aviation Safety Engineer, Compliance & Airworthiness Division, FAA, 10101 Hillwood Parkway, Fort Worth, TX 76177; phone: (817) 222-4973; email: bang.nguyen@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2023-0024 and Project Identifier AD-2022-01492-A” at the beginning of your comments. The most helpful comments reference a specific portion of the final

rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Bang Nguyen, Aviation Safety Engineer, Compliance & Airworthiness Division, FAA, 10101 Hillwood Parkway, Fort Worth, TX 76177. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

The FAA has received reports of corrosion and cracks found on elevator balance weights on Mooney International Corporation Model M20F airplanes. The affected airplanes are equipped with smooth skin elevators, part number (P/N) 430000-503 and P/N 430000-504, with hybrid material elevator balance weight P/N 430018-1 installed. The hybrid elevator balance weight P/N 430018-1 is similar in size and shape (but not in weight) to the elevator balance weight P/N 430016-7. It is possible the hybrid elevator balance weight P/N 430018-1 has also been installed on Model M20C, M20D, M20E, and M20G airplanes. The hybrid elevator balance weights were found to have developed

galvanic corrosion and visible signs of cracking, which caused them to become severely displaced.

This condition, if not addressed, could result in partial or total separation of the elevator balance weight during flight, which could lead to elevator flutter and consequent loss of control of the airplane. The FAA is issuing this AD to address the unsafe condition on these products.

FAA's Determination

The FAA is issuing this AD because the agency has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Related Service Information under 1 CFR Part 51

The FAA reviewed Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022. This service information specifies procedures for inspecting to determine whether a hybrid elevator balance weight P/N 430018-1 is installed, inspecting each hybrid elevator balance weight P/N 430018-01 for chipping or cracking, and depending on the inspection results, either repetitively inspecting each hybrid elevator balance weight or replacing with a non-hybrid (lead) elevator balance weight P/N 430016-7. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

AD Requirements

This AD requires accomplishing the actions specified in the service information already described and prohibits the installation of an affected elevator balance weight on any airplane.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment

prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because corrosion on the elevator balance weight could lead to cracks that, if not addressed, could result in elevator flutter leading to elevator failure with consequent loss of control of the airplane. Because undetected corrosion could have developed over time and therefore the cracks can develop quickly and without warning, the affected elevator balance weights must be inspected before further flight. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forego notice and comment.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 3,098 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Inspect for existence of P/N 430018-1	1 work hour x \$85 per hour = \$85	Not Applicable	\$85	\$263,330

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the inspection. The FAA estimates the following costs to do any necessary inspection or replacement that would be required based on the results of the initial inspection. There were 137 elevator balance weights P/N 430018-1 produced. Therefore, up to 137 airplanes of the 3,098 affected airplanes could have the affected elevator balance weights installed. The FAA has no way of knowing if all 137 affected elevator balance weights are installed.

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Inspect elevator balance weights P/N 430018-1 for cracks/corrosion	6 work-hours x \$85 per hour = \$510	Not Applicable	\$510 per inspection cycle
Replace elevator balance weights P/N 430018-1	10 work-hours x \$85 per hour = \$850	\$650	\$1,500

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the

national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-02-04 Mooney International Corporation: Amendment 39-22311; Docket No. FAA-2023-0024; Project Identifier AD-2022-01492-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

Mooney International Corporation Model M20C, M20D, M20E, M20F, and M20G airplanes, all serial numbers up to 680170 inclusive, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code: 5520, Elevator Structure.

(e) Unsafe Condition

This AD was prompted by reports of the hybrid elevator balance weight cracking. The FAA is issuing this AD to detect and address the corrosion and cracking of the

hybrid elevator balance weight. The unsafe condition, if not addressed, could result in partial or total separation of the elevator balance weight during flight, which could lead to elevator flutter with consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Action

(1) Before further flight after the effective date of this AD, inspect both elevators to determine if any hybrid elevator balance weight part number (P/N) 430018-1 is installed in accordance with STEP 1.1 of the Instructions section in Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022. The repetitive inspection and replacement required by paragraphs (g)(2) and (3) of this AD are not required if any hybrid elevator balance weight P/N 430018-1 is not installed.

(2) If any hybrid elevator balance weight P/N 430018-1 is installed, before further flight after the effective date of this AD and thereafter at intervals not to exceed 100 hours time-in-service or 12 months, whichever occurs first, inspect each hybrid elevator balance weight P/N 430018-1 for any corrosion and cracks in accordance with STEP 2 of the Instructions section in Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022.

(3) If any corrosion or cracks are found as a result of any inspection required in paragraph (g)(2) of this AD, before further flight, replace the elevator balance weight with a non-hybrid (lead) elevator balance weight P/N 430016-7 in accordance with STEPS 3.1.1 through 3.1.8 of the Instructions section in Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022, except contacting Mooney Service Parts in STEP 3.1.7 is not required by this AD. The repetitive inspections required by paragraph (g)(2) of this AD are no longer required for that elevator balance weight after this replacement.

(4) As of the effective date of this AD, do not install hybrid elevator balance weight P/N 430018-1 on any airplane.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

For more information about this AD, contact Bang Nguyen, Aviation Safety Engineer, Compliance & Airworthiness Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: (817) 222-4973; email: bang.nguyen@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Mooney International Corporation Service Bulletin M20-345A, dated December 13, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact Mooney International Corporation, 165 Al Mooney Road North, Kerrville, TX, 78028; phone: (800) 456-3033; email: support@mooney.com; website: mooney.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on January 19, 2023.

Gaetano A. Sciortino, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2023-01730 Filed: 1/24/2023 4:15 pm; Publication Date: 1/27/2023]